

REMARKS

This application pertains to a novel pressure-sensitive adhesive based on a chemically crosslinked polyurethane by which paper, paperboard and other lightweight articles can be bonded to each other and then separated without residue or damage.

Claims 1-12 are pending.

Claims 1-12 stand provisionally rejected for obviousness-type double patenting over claims 1-3 and 6-19 of copending application serial number 10/815,894.

This rejection is obviated by the accompanying Terminal Disclaimer, and should now be withdrawn.

Claims 1-8 and 10-12 stand provisionally rejected for obviousness-type double patenting over claim 1 of copending application serial number 10/190,799.

This rejection is obviated by the accompanying Terminal Disclaimer, and should now be withdrawn.

Claims 1-12 stand provisionally rejected for obviousness-type double patenting over claims 1-10, 15-24 and 27-28 of copending application serial number 10/826,965.

This rejection is obviated by the accompanying Terminal Disclaimer, and should

now be withdrawn.

Claims 1-8 and 10-12 stand rejected under 35 USC 102(e) as being anticipated by Schumann (US 2003/0059706).

Applicants' claims require that the ratio of the number of hydroxyl groups in the diol component to the number of hydroxyl groups in the triol component be between 0.7 and 9.0. Nowhere in the Schumann reference are such ratios taught or suggested.

Applicants enclose a product identification sheet pertaining to the diols and polyols used in the Examples of the Schumann reference, to show the "old" names of the products and the equivalent "new" names, together with their OH Numbers and Molecular weights. Using this data, Applicants calculated the ratios of the number of Diol -OH groups to Triol-OH groups in the relevant examples of the Schumann reference, as well as the Example pointed to by the Examiner at paragraphs 142-143 (known adhesive 5). The results are annexed hereto in tabular form.

As the Examiner can see, none of the Examples came within the range required by Applicants' claims. Since there is also nothing in the reference that would suggest the changes that would be required to form a pressure-sensitive adhesive within the scope of Applicants' claims, there is no way that any person reading the Schumann reference could ever arrive at Applicants' novel pressure sensitive adhesive.

The Examiner should also notice that in Examples 22-25 of the Schumann

reference, both the diols and triols have molecular weights > 1000. This is a second feature that further distances those Examples outside the scope of Applicants' claims.

In addition, there is absolutely nothing to be found anywhere in the Schumann reference that would lead to adhesives having the novel features of Applicants' adhesives, such as would allow them to be useful for fixing notes etc. (Applicants' claim 8).

Accordingly, Applicants' claims cannot be seen as anticipated by or obvious over Schumann (US 2003/0059706), and the rejection of claims 1-8 and 10-12 under 35 USC 102(e) as anticipated by Schumann (US 2003/0059706) should now be withdrawn.

In view of the accompanying Terminal Disclaimers, amendments and remarks, it is believed that claims 1-12 are now in condition for allowance. Reconsideration of said claims by the Examiner is respectfully requested and the allowance thereof is courteously solicited.

CONDITIONAL PETITION FOR EXTENSION OF TIME

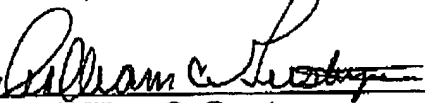
If any extension of time for this response is required, Applicants request that this be considered a petition therefor. Please charge the required petition fee to Deposit Account No. 14-1263.

ADDITIONAL FEE

Please charge any insufficiency of fee or credit any excess to Deposit Account

No. 14-1263.

Respectfully submitted,
NORRIS, McLAUGHLIN & MARCUS, P.A.

By 
William C. Gerstenzang
Reg. No. 27,552

WCG/zs

Encl- Product Identification Sheet (2 pages)
Comparison Results (4 pages)

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I hereby certify that this correspondence is being transmitted via facsimile, no 571-273-8300 to the United States Patent and Trademark Office, addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date below.

By 
Zsuzsa Schuster
Date March 24, 2006

Linear Polyether Diols

New Name	Old Name	Identical	OH Number	Molecular Weight	Remarks
Desmophen 1111 BD	Arcol PPG 1000 Arcol 1010 A	Yes No	111 mg KOH/g	1000 g/mol	acidified
Desmophen 1112 BD	Arcol PPG 1000 N Arcol 1010 Baycoll BD 1110 Desmophen 1600 U	Yes No No No	111 mg KOH/g	1000 g/mol	not acidified
Desmophen 1261 BD	Arcol 1004 A	Yes	260 mg KOH/g	430 g/mol	acidified
Desmophen 1262 BD	Arcol 1004	Yes	260 mg KOH/g	430 g/mol	not acidified
Desmophen 1730 ED	Desmophen 250 U	Yes	726 mg KOH/g	164 g/mol	
Desmophen 2061 BD	Arcol PPG 2000 Arcol 1020 A	Yes No	56 mg KOH/g	2000 g/mol	acidified
Desmophen 2062 BD	Arcol PPG 2000 N Baycoll 2060 Desmophen 1900 U Desmophen 3600 Z Arcol 1020	Yes No No No No	56 mg KOH/g	2000 g/mol	not acidified
Desmophen 4027 BD	Desmophen 5158 T	Yes	28 mg KOH/g	4000 g/mol	13% EO containing
Desmophen 4028 BD	Baycoll BD 4028 Arcol 1025	Yes No	28 mg KOH/g	4000 g/mol	20% EO containing



LSM Adhesive Materials
Competence Center Baycol / Desmodur S
 Straße 15.03.2001 8:16
 Mail: Postfach 101111, 42699 Solingen, Nordrhein-Westfalen

Long Chain Branched Polyether Polyols

New Name	Old Name	Identical	OH Number	Molekular Weight	Remarks
Desmophen 3061 BT	Desmophen 3426 L Arcol 1014 S	Yes No	56 mg KOH/g	3000 g/mol	Glycerol low EO
Desmophen 4040 BS	Desmophen 1910 U Baycol BS 4040	Yes Yes	42 mg KOH/g	3750 g/mol	100% PO TMP/PG
Desmophen 5031 BT	Baycol BT 5031 Arcol 1074	Yes No	28 mg KOH/g	6000 g/mol	Glycerol 14% EO
Desmophen 5035 BT	Baycol BT 5035 Desmophen 1915 U VPPU 21 K 01 Arcol 1042	Yes Yes Yes No	35 mg KOH/g	4800 g/mol	Glycerol 13% EO
Desmophen 5036 BT	Arcol 1042 A	No	35 mg KOH/g	4800 g/mol	Desmophen 5035 BT acidified
Desmophen 5037 BT	Arcol 1089	Yes	37 mg KOH/g	4500 g/mol	TMP 9% EO
Desmophen 4059 EV	Baycol ET 3059 Desmophen 1902 U Baygal K 320	Yes Yes Yes	59 mg KOH/g	3800 g/mol	Ethylenediamine
Desmophen 5027 GT	Desmophen 3699 R Bayflex 5920 M	Yes Yes	28 mg KOH/g	4800 g/mol	Glycerol 20% SAN
Desmophen 5028 GT	Baycol BT 5028 Desmophen 1920 D	Yes Yes	28 mg KOH/g	4800 g/mol	Glycerol 20% PHD
Desmophen 5029 GT	Arcol 1096	Yes	20 mg KOH/g	4800 g/mol	Glycerol 40% SAN



LS-M Adhesive Materials
Competence Center Baycol / Desmodur S
H4008 1505/2001
only for internal use

US 10/816,277 (DE 103 17 789)
Comparison with US 10/190,799

As said in the e-mail Bayer changes the names of same products. The table shows the changes. Please find enclosed the new names of the products we described in the examples 16 to 25 in US 10/190,799.

Old Name	New Name	Number of OH (mg KOH/g)	Number of OH (mmol OH / kg)	Number of NCO (mmol NCO / kg)
Arcol 1004	Desmophen 1262 BD	260	4635*	
Baycoll BT 5031	Desmophen 5031 BT	28	499*	
Vestanat IPDI				8998**

* calculated using the number of OH in c. 3; molar mass of KOH: 56,1 g/mol.

** see US 10/816,277

Using this info we can calculate the following ratios of the number of hydroxyl groups in the diol component to the number of hydroxyl groups in the triol component.

Example 16

	educt	part of weight [Gew.-%]	Number of OH respectively NCO groups, relating to the part of weight in percent
A-component	Arcol 1004 ®	2,0	9,27 mmol OH
	Baycoll BT 5031 ®	27,4	13,67 mmol OH
	ECKA-Kupfer CH-S 24 ®	60,0	
	Welsseinkalk ®	5,0	
	Aerosil R 202 ®	3,0	
	Mark DBTL ®	0,2	
B-component	Vestanat IPDI ®	2,4	21,6 mmol NCO

Ratio Number of Diol-OH / Number of Triol-OH: 0,68

Ratio NCO / OH: 0,94

Example 17

	educt	part of weight [Gew.-%]	Number of OH respectively NCO groups, relating to the part of weight in percent
A-component	Arcol 1004 ®	3,8	17,61 mmol OH
	Baycoll BT 5031 ®	53,3	26,60 mmol OH
	ECKA-Kupfer CH-S 24 ®	20,0	
	Weissfeinkalk ®	15,0	
	Aerosil R 202 ®	3,0	
	Mark DBTL ®	0,2	
B-component	Vestanat IPDI ®	4,7	42,29 mmol NCO

Ratio Number of Diol-OH / Number of Triol-OH: 0,66
Ratio NCO / OH: 0,96

Example 18

	educt	part of weight [Gew.-%]	Number of OH respectively NCO groups, relating to the part of weight in percent
A-component	Arcol 1004 ®	3,2	14,83 mmol OH
	Baycoll BT 5031 ®	44,6	22,26 mmol OH
	ECKA-Kupfer CH-S 24 ®	5,0	
	Weissfeinkalk ®	40,0	
	Aerosil R 202 ®	3,0	
	Mark DBTL ®	0,2	
B-component	Vestanat IPDI ®	4,0	35,99 mmol NCO

Ratio Number of Diol-OH / Number of Triol-OH: 0,67
Ratio NCO / OH: 0,97

Example 19

	educt	part of weight [Gew.-%]	Number of OH respectively NCO groups, relating to the part of weight in percent
A-component	Arcol 1004 ®	3,8	17,61 mmol OH
	Baycoll BT 5031 ®	53,3	26,60 mmol OH
	ECKA-Kupfer CH-S Nr. 34862 / G AG 5 ®	20,0	
	Weissfeinkalk ®	15,0	
	Aerosil R 202 ®	3,0	
	Mark DBTL ®	0,2	
B-component	Vestanat IPDI ®	4,7	42,29 mmol NCO

Ratio Number of Diol-OH / Number of Triol-OH: 0,66
Ratio NCO / OH: 0,96

Example 20

	educt	part of weight [Gew.-%]	Number of OH respectivley NCO groups, relating to the part of weight in percent
A-component	Arcol 1004 ®	3,8	17,61 mmol OH
	Baycoll BT 5031 ®	53,3	26,60 mmol OH
	CONDUKT-O-FIL S-3000- S3M®	20,0	
	Weissfeinkalk ®	15,0	
	Aerosil R 202 ®	3,0	
	Mark DBTL ®	0,2	
B-component	Vestanat IPDI ®	4,7	42,29 mmol NCO

Ratio Number of Diol-OH / Number of Triol-OH: 0,66

Ratio NCO / OH: 0,96

Example 21

	educt	part of weight [Gew.-%]	Number of OH respectivley NCO groups, relating to the procentual part of weight
A-component	Arcol 1004 ®	3,8	17,61 mmol OH
	Baycoll BT 5031 ®	53,3	26,60 mmol OH
	STANDART Aluminiumpulver Lack NOT®	20,0	
	Weissfeinkalk ®	15,0	
	Aerosil R 202 ®	3,0	
	Mark DBTL ®	0,2	
B-component	Vestanat IPDI ®	4,7	42,29 mmol NCO

Ratio Number of Diol-OH / Number of Triol-OH: 0,66

Ratio NCO / OH: 0,96

The examples 16 to 25 are outside of the scope of claim 1.

Known adhesive 5

	educt	part of weight	part of weight [Gew.-%]	Number of OH respectively NCO groups, relating to the part of weight in percent
A-component	ArcoI 1004 ®	6,4	5,9	27,35 mmol OH
	Baycoll BT 5031 ®	88,5	82,1	40,97 mmol OH
	Aerosil R 202 ®	4,8	4,5	
	Mark DBTL ®	0,3	0,3	
B-component	Vestanat IPDI ®	7,8	7,2	64,79 mmol NCO

Sum:

107,8

Sum:

100

Ratio Number of Diol-OH / Number of Triol-OH: 0,67

Ratio NCO / OH: 0,95